

Narrative Proposal New Orleans Recycling Expansion and Planning

Solid Waste Infrastructure For Recycling (SWIFR) Grant Program for Political Subdivisions of States and Territories

February 2023

Location of Supplemental Materials

The Project application webpage with a copy of the application and supporting and referenced documents is located at: www.nola.gov/SWIFR

Criteria 1: Project Summary and Approach

A. Project Narrative

Please accept this application on behalf of the City of New Orleans, a political subdivision of the State of Louisiana and an eligible applicant for SWIFR funding as outlined in *Section III.A: Eligible Applicants* of the RFA for the New Orleans Recycling Expansion and Planning (NOREAP) Project. The proposed project will increase, expand, and optimize the collection of municipal solid waste; it will demonstrate a significant and measurable increase in the diversion, recycling rate, and quality of materials collected from the residential sector of the city's municipal solid waste stream; and it will further EPA's progress against both the National Recycling Strategy and the FY 2022-2026 Strategic Plan.

The goals of this project are to (1) expand the city's residential curbside recycling program to all eligible households that have not already opted into the service to ensure universal and equitable access to curbside recycling for all, and (2) develop a 10-year Solid Waste Master Plan (SWMP) that will outline a comprehensive waste diversion strategy and roadmap for the city to achieve its waste diversion goals and support the long-term sustainability of the project.

This project qualifies for Track 1 as defined under *Section I.F: Program Tracks* of the RFA. Justification for a Track 1 determination has been included as an attachment to this application package and additional information is included in Criteria 2: Environmental Justice. The City of New Orleans qualifies for Track 1 in multiple categories and will outline those in this application.

In December 2022, the City of New Orleans released its updated climate action plan "Net-Zero by 2050" (See Appendix K) in which it highlights waste diversion and recycling as critical opportunities and strategies to creating equitable opportunities to mitigate the impact of climate change. The City of New Orleans currently recycles less than 2% of its residential waste stream, which is far below the national average. It is estimated that this project will initially recycle about 19,000 tons per year of readily usable recyclable materials that are currently being landfilled in the city, and up to 30,000 tons annually in future years as the program matures. This grant proposal is seeking financial support from the US EPA to partially fund some key strategies outlined in this plan. The estimated cost for the project is \$5,432,609 and the city is requesting support from the US EPA for \$3,982,000.

The goals and objectives of this project are to provide the infrastructure and education necessary to expand the recycling program and add valuable materials to the local circular economy, divert materials away from the landfill, and improve the quality of life and health for New Orleans residents by:

1. Expanding the city's residential curbside recycling program to all eligible households.

The city is proposing to provide recycling carts to New Orleans residents that do not already have one, thus making the city's curbside recycling program universal. This means that all single-family homes, or multi-unit buildings of 4 or less units, that have not currently opted into recycling services will automatically be provided with a recycling cart. The city currently

operates weekly recycling collection from 65-gallon carts on an opt-in basis. There are also some legacy black recycling carts at New Orleans homes that closely resemble trash carts. The city will also attempt to begin replacing these.

The City estimates based on collection data and cart requests that there are about 73,000 homes, or about 46% of total eligible homes, that do not currently have a recycling cart under the current opt-in program. Additionally, the city proposes to replace 10,000 existing black recycle carts, that are often being used as extra trash carts, for a total request of 83,000 carts.

Recycling opt-in programs create participation barriers that disproportionally impact disadvantaged communities. A large majority of these residents are disadvantaged and/or are in U.S. EPA designated Environmental Justice areas (Tier 1) and this project will rectify the unintended bias created by the opt-in approach and deliver equitable recycling program. The project will benefit an estimated 196,000 residents who live in these 83,000 households. The delivery of recycling carts will be supported by an aggressive education effort to ensure the proper usage of the carts, acceptable recyclable materials, and the benefits of recycling. In addition, the city will also use this project as an opportunity to continue to educate customers that have already opted into recycling services. This project will touch all 156,586 households in New Orleans with education, directly add new recycling services to 73,000 households and better recycling to 10,000 homes and is expected to initially add an additional 19,000 new tons of recyclables collected per year.

2. Developing a Strategic Solid Waste Master Plan. The City of New Orleans has never produced a Solid Waste Master Plan. A portion of the funding requested will be used to develop a 10-year strategic solid waste plan that will provide a roadmap to ensure the city meets its waste diversion and climate goals and positions the city to become a regional leader with its waste diversion efforts. This strategic plan will include, but not be limited to, an evaluation of regional recycling processing infrastructure and capacity; explore opportunities and needs to allow for organics diversion including food waste; explore infrastructure and policy needs to address waste diversion in multifamily and commercial operations; an evaluation of infrastructure needs for waste elimination including reuse opportunities; and to determine collection and processing infrastructure needs for non-traditional recyclables like construction and demolition waste, e-waste and other hard to recycle materials. The Solid Waste Master Plan will undergo a public input process to gather feedback and buy-in from residents.

To ensure the success of this project, New Orleans has secured the support of The Recycling Partnership, a mission-driven NGO, committed to advancing a circular economy by building a better recycling system (more info at recyclingpartnership.org); and New Orleans Climate Action Equity Project (CAEP), a coalition of local community-based organizations focused on promoting climate justice for all New Orleanians (see Appendix I for CAEP 2019 report "Taking Steps on Climate Equity").

B. Identify and explain how the project meets the requirements of Section 1.G: Scope of Work, Section I.H, General Environmental Results and Section I.1: National Recycling Strategy Plan Linkage

The project meets the requirements in <u>Section I.G: Scope of Work</u> by demonstrating "a significant and measurable increase in the diversion, recycling rate, and quality of materials collected for municipal solid waste."

It will (1) Establish, increase, expand, or optimize collection and improve materials management infrastructure by distribution of recycling carts to every eligible single-family home and multi-family home with 4 or less units, ultimately adding 83,000 new recyclers in the city. It will also optimize the recycling collection program by maximizing route efficiency, reducing the need to drive by homes without recycling carts, improve safety for recycling collection operators, and divert 19,000 new tons into the recycling stream. (2) Establish, increase, expand, or optimize capacity for materials management. By developing a SWMP the city will establish and create opportunities to optimize capacity for more materials to flow through the circular economy instead of being landfilled. It will develop a roadmap for infrastructure, policy, education, and community engagement that will lead to expanded services and opportunities to reduce and divert more waste. (3) Establish, improve, expand, or optimize end-markets for the use of recycled commodities This project will increase the supply of materials for local end markets. In 2016 study, the Southeast Recycling Development Council, funded in part by the EPA, determined that more than 360 key southeastern manufacturers look to recycled feedstock to develop new consumer goods. With this investment in expanded recycling in New Orleans the recyclable plastic, glass, metal, and paper will be used to supply these regional manufacturers to make new products (see Appendix A- Regional maps of end market users). (4) Demonstrate a significant and measurable increase in the diversion, recycling rate, and quality of materials collected for municipal solid waste. This project will quickly add 19,000 tons of new recyclable materials per year to the residential recycling program. As the program matures it is estimated that this will increase to closer to 30,000 tons per year. This coupled with future diversion from commercial, multi-family, organics collection, C&D, electronics, and other waste streams will help the city achieve its goals, meet or exceeds the national recycling rate, and yield measurable climate impacts. It is also believed that success in New Orleans will provide a catalytic regional model and future infrastructure in the State and the Gulf Coast region that will allow for future waste diversion opportunities.

The project aligns with the requirements of <u>Section I.H: General Environmental Results</u> by supporting the following FY 2022-2026 EPA Strategic Plan Goals:

- 1. Goal 1: Objective 1.1 "Reduce Emissions that Cause Climate Change": The first phase of project will divert an additional 19,000 tons away from the landfill in first full year of implementation and that rate is expected to grow as the program matures and residents become more familiar with it. This diversion will reduce waste being sent to local landfills for disposal. Using the EPA Greenhouse Calculator, this project will result in a reduction of greenhouse gas emission of approximately 61,200 MTCO2e per year and as the program matures more tons are expected to be diverted. Appendix E illustrates the expected growth in recycling.
- 2. Goal 2: Objective 2.1 "Promote Environmental Justice and Civil Rights at the Federal, Tribal, State, and Local Levels": New Orleans is on the front line of climate change impacts, where rising sea levels, increasing storm surge exposure, and extreme heat episodes directly threaten the health of residents and the reliability of infrastructure systems. These climate stressors exacerbate the existing community health inequities attributed to disproportionate exposure to environmental hazards. While this project is just one strategy in a toolbox of many

strategies, it is one that allows residents to actively participate in being part of the solution by helping to divert their waste from landfills, resulting in reduced emissions and exposure to communities near landfills.

3. Goal 6: Objective 6.2 "Reduce Waste and Prevent Environmental Contamination": Immediately increasing and containerizing recycling will start the city on its path to a more robust and organized waste management system and establishing a plan that outlines the needs for infrastructure, policy and oversight will result in proper waste sortation and storage and thus prevents contamination. Effective and accessible waste management infrastructure reduces illegal dumping and littering, and ultimately will help keep toxins and other harmful materials away from vulnerable populations and the region's wildlife.

This project also supports many of the objectives of the <u>2022-2026 National Recycling Strategy</u> <u>objectives</u> described including:

<u>Objective A:</u> A1. Promote market development. Increase the supply of high-quality recyclables into the regional marketplace that supports regional manufacturing end-users. <u>Objective B:</u> B6. Increase collection of recyclable materials. Immediately add an additional 19,000 tons of recyclables per year and establish a plan and roadmap for additional growth in the amount of waste diverted from regional landfills.

Objective C: C1. Enhance education and outreach to the public on the value of recycling and how to recycle properly; and C2. Ensure resources are available for education and outreach initiatives. Through direct community engagement (service direct mail, cart education, how to guides, digital media, and traditional media) and public education New Orleans will learn and better understand the local recycling systems, and how to properly use them.

Objective D: D2. Conduct an analysis of different policies that could address recycling challenges. D5. Share best practices on policies, programs, funding opportunities and outreach through a free, publicly accessible online clearinghouse. The proposed SWMP will allow the city to take an objective look at the policy and infrastructure needs that will address the need of New Orleans to overcome it's recycling challenges. Through that process it will evaluate best practices, funding opportunities and it will engage the community to understand values and needs. All work will be publicly accessible through the city's Office of Resilience and Sustainability website.

<u>Objective E:</u> **E2.** Create a tracking and reporting plan. The city will develop a reporting mechanism to share recycling data with the community through its climate action reporting. It is also committed to enrolling in the Municipal Measurement Program (MMP) supported by The Recycling Partnership.

<u>C. Identify Goals and Objectives of the project and include an easy-to-understand plan to</u> meet stated objectives.

Scope of Work

The City of New Orleans is proposing the following scope of work to ensure this project is completed successfully.

Goal 1: Implement Universal Curbside Recycling Service in New Orleans.

<u>Task 1:</u> Provide recycling carts to every eligible home (single family homes or 4 or less unit multi-family units).

Sub-tasks:

Task 1.1 Secure a procurement contract for recycling carts.

Task 1.2 Secure an "Assembly and Delivery" contractor and develop a delivery plan

Task 1.3 Deliver recycling carts.

<u>Deliverables:</u> 83,000 recycling carts delivered to New Orleans households.

Responsible Parties: The Department of Sanitation and The Recycling Partnership

Goal 2: Educate Residents about Recycling.

<u>Task 2:</u> Develop and Deliver an Education and Outreach Strategy to Educate New Orleans about Recycling

Sub-Tasks:

Task 2.1: Develop messaging and collateral for customers receiving new recycling carts. This will include at least two direct mail communications that new recycling carts will be arriving and how to properly recycle, and delivery packet with the new cart.

Task 2.2 Reeducate Existing Recyclers. Develop citywide education that will be delivered to new and existing recycling households to reenforce proper recycling. Messaging will include but not be limited to a direct citywide communication about what can be recycled and a direct top issues mailer.

Task 2.3 Citywide education. Support direct communication with a digital and traditional education and community engagement.

<u>Deliverables:</u> Increased recycling tons collected.

<u>Responsible Parties:</u> Department of Sanitation, Office of Resilience and Sustainability, The Recycling Partnership

Goal 3: Develop a plan and roadmap for the city to achieve its waste diversion goals.

Task 3: Develop a Solid Waste Master Plan

Sub-Tasks:

Task 3.1 Develop an RFP to procure consulting services to develop the plan.

Task 3.2 Develop the Plan that includes community stakeholder engagement.

Task 3.3 Finalize City approval of Plan. The plan will be vetted and approved through the formal city process to ensure a document that is officially adopted.

Deliverables: An approved/adopted, New Orleans Solid Waste Master Plan

Responsible Parties: Department of Sanitation, Office of Sustainability and Resilience, New Orleans Climate Action Project, The Recycling Partnership.

Goal 4: Measurement

<u>Task 4:</u> The city will measure success of this program by total tons landfilled, total tons recycled and measure a recycling rate, so that they may be compared against existing data.

<u>Deliverables:</u> EPA reports, participation in the MMP

Responsible Parties: Department of Sanitation, Office of Sustainability and Resilience

D. Timeline

A reasonable timeline has been established that will allow for timely and successful execution of the tasks associated with the project and deliver the goals and objectives by the Q3 2025. A Gantt chart is being submitted as an additional attachment illustrating milestones. See Appendix B -Timeline Gantt Chart. Each of the above tasks includes an anticipated timeline for project implementation based on an anticipated funding availability of October 2023.

Goal 1

<u>Task 1:</u> Provide recycling carts to every single-family home, and 4 or less unit multi-family. <u>Timeline:</u> Q4 2023 to Q1 2025

Goal 2

<u>Task 2:</u> Develop and Deliver an Education and Outreach Strategy to Educate New Orleans about Recycling

Timeline: Q1 2024 to Q3 2025

Goal 3

Task 3: Develop a Solid Waste Master Plan

Timeline: Q4 2023 to Q1 2025

Goal 4

Task 4: Measurement

Timeline: Q1 2025 to Q3 2025

Criteria 2: Environmental Justice

This project will help to address the disproportionate and adverse human health, environmental, climate-related and other cumulative impacts, as well as the accompanying economic challenges of such impacts, resulting from industrial, governmental, commercial and/or other actions on disadvantaged communities.

A. Community Benefit

The City of New Orleans is a historically underserved community, facing generational issues of poverty, educational inequality, and health problems due to disproportionate exposure to environmental hazards. Approximately 25% of the city is below the national poverty line and over two-thirds of the population is non-white. Like many other southern cities, generations of residents have been faced poverty, are less educated, and have less economic opportunity. 102 of the 177 census tracts in the city are deemed "disadvantaged" based on the Climate and Economic Justice Screening Tool from the White House Council on Environmental Quality. Waste and litter have been prominent environmental hazards with the presence of a superfund site that used to be a local landfill. To help illustrate the challenges faced in New Orleans the city has attached additional documentation. See Appendix C -Environmental Justice.

The proposed project in no way pretends to solve all these concerns. However, making recycling accessible and equitable through universal carting of homes, and providing robust and evidence-based education to the community, allows all residents to play a daily role in helping to maintain a more sustainable city, engage in the circular economy, and address climate change. The hands-

on activity of recycling every day allows participation, creates knowledge and a value to protect the environment, reduces landfill disposal and directly reduces the climate impacts of waste.

B. Community Engagement

To ensure the meaningful participation of target community residents with respect to the design, project planning, and performance of the project, we will be working with in partnership with the Climate Action Equity Project to consult and provide input throughout each phase of the project and especially engaging this partnership to support educational messaging and the development of an equitable SWMP. The development of the SWMP will also include community engagement, supported by the Climate Action Equity Project, to ensure community values are captured in the plan's recommendations.

This project has also built-in significant community education and engagement on the value of recycling and proper use of recycling services to ensure the implementation of curbside recycling to all residents is successful. This project will directly engage residents through multiple outlets to ensure the broadest reach possible.

Criteria 3. Measuring Environmental Results: Anticipated Outputs and Outcomes

The following outputs and outcomes will be measured and reported on over the course of the assistance agreement funding period and include:

- **Households impacted:** estimated at 156,000 HH
- **Tons diverted:** Estimated at 19,000 tons year 1 and 2, incremental growth during the next 10 years.
- Materials diverted: Plastic, paper, cardboard steel and aluminum.
- **Number of recycling carts delivered:** Estimated at 83,000 carts
- **GHG reduced:** 61,200 MTCO2e
- Percentage of political subdivisions served due to establishing, increasing, expanding, or optimizing collection: 100%
- Number of disadvantaged communities served (as defined by this solicitation) due to establishing, increasing, expanding, or optimizing collection: 102 census tracts within the city that are designated "disadvantaged" by at least one metric of the Climate and Economic Justice Screening Tool from CEQ

Actual outputs and outcomes at the conclusion of the project will be compared to the anticipated outputs and outcomes described above to help evaluate project success. Outputs and outcomes will be quantitatively measured were applicable by comparing pre-intervention metrics with post-intervention metrics. A logic model is provided. See Appendix D-Logic Model. Additionally, the city is providing some background solid waste data and recycling projections. See Appendix E – Additional data and tonnage projections.

Criteria 4. Programmatic Capability and Past Performance

A. Previous Assistance Agreements & Past Performance

1. EPA Community-based Integrated Rodent Management Education Program - \$20,000 (Start: 11/21/21; Close 10/31/22)

- 2. EPA Superfund Redevelopment Program "Reuse Assessment Agriculture Street Landfill Superfund Site" July 2022
- 3. EPA RE-Powering America's Land Program "Solar Reuse Assessment and Feasibility Study Report, Agriculture Street Landfill Site" July 2021
- 4. USDOT Safety Data Initiative \$402,791 (Start: 9/21/2020; Closed 9/20/2021)
- 5. 21 FEMA Public Assistance Program Grants closed since Feb 2020 \$15,208,526.87 total

As can be corroborated by the agencies and organizations named above, the City has extensive experience with the successful completion and management of assistance agreements. We have a demonstrated ability to meet reporting requirements, and in the case of each of the assistance agreements listed above, we have successfully submitted acceptable final technical reports, provided adequately and timely interim reports on progress toward achieving the expected outputs and outcomes defined under the agreements, and detailed reporting on if such progress was not being made with explanations and/or inferences as to the cause of any setbacks.

B. Organizational Capacity and Experience

Our organization has extensive experience that will be leveraged for the successful execution of this project. Our plan to achieve the project objectives in a timely manner includes the following:

- We will build upon the workplan outlined in this proposal, monitoring project progress to meet timelines and/or adjust them as appropriate.
- Greg Nichols, Deputy Chief Resilience Officer, will oversee the administration of this grant and will be responsible for leading the project team, liaising with EPA staff, tracking progress, and identifying necessary resources.
- Charlotte Pitt, Director of Grant Development, will lead support from the Recycling Partnership.
- Collectively the New Orleans team has decades of experience administering and delivering successful projects and services.

Staff expertise include Matt Torri, Greg Nichols, Zach Monroe, Daniel Jatres, Cheryn Robles from the City of New Orleans, and Charlotte Pitt from The Recycling Partnership. Resumes are included in Appendix F.

Criteria 5. Budget and Expenditure of Awarded Grant Funds

The City of New Orleans is proposing to use EPA grant funds to partially support the purchase of recycling carts, to partially pay for education and outreach around those carts, and to fully fund consulting services to support the city in developing a comprehensive solid waste master plan.

TOTAL PROJECT COST: \$5,432,609.00

TOTAL EPA FUNDING REQUESTED: \$3,982,000

Project Component	Cost
83,000 Residential Recycling Carts	\$4,565,000
Education and outreach materials for carts	\$468,000
Solid Waste Master Plan	\$350,000
New Orleans Staff support	\$49,609
Total	\$5,432,609.00

Please refer to the Budget Table & Description a for a detailed breakdown and justification of proposed project costs.

Criteria 6: Project Sustainability

By coupling recycling infrastructure and education with a 10-year SWMP, the project has been designed with sustainability and longevity in mind and will have value to the city beyond the conclusion of the award period. In addition, the recycling carts that will be purchased will have an estimated life of 15 or more years and will have a standard 10-year industry warranty. City solid waste collection services, including recycling, are funded by the city and user fees, so collection services will be sustained into the future. The city anticipates that this equipment will be used for the full 15 years under conditions of normal wear and tear.

The city recognizes that without ongoing education and outreach, there may be a decline in the use of services. The Office of Resilience and Sustainability is committed to ensuring that recycling education and outreach becomes a part of its annual workplan for both. As further testament to the project's sustainability and the benefits of a mature program with universal access to recycling, it is estimated that within three to five years the amount of recyclables collected should increase to 30,000 tons per year.

The development of a 10-year Solid Waste Master Plan will allow for ongoing progress toward the city's recycling and waste management goals and creates a roadmap that should withstand political changes over the coming years. The SWMP will provide a framework to inform prioritization and distribution of resources for recycling projects for the next 10 years and will also be a model on which to base subsequent long term planning initiatives.

Criteria 7: Innovative Approaches and Solutions

In a state that has very little foundation for waste diversion and recycling infrastructure, universal cart access, evidence-based education to all residents, and long-term solid waste planning is a novel intervention. This project supports emerging recycling investments in the region, southeastern end markets, and addresses local challenges particular to disadvantaged communities. There has been a lack of consistent recyclables flowing through the region which has limited investments in MRFs and hauling infrastructure, and that this level of investment in New Orleans and projected new tons of recyclables could really help to invigorate and catalyze the system overall in an area widely considered a recycling desert. Further, this project will serve as a replicable model in many Louisiana communities, especially the parishes that are close

to New Orleans, including other large population centers and others with historically disadvantaged populations. The State of Louisiana does not currently track diversion rates, nor does the Louisiana Department of Environmental Quality (LDEQ) have dedicated staff to work on recycling enhancement or development. Investing in basic foundational recycling infrastructure and planning in New Orleans could help to set a new standard for recycling in neighboring communities and in the State of Louisiana.

Criteria 8: Project Replicability

The City of New Orleans is applying tried and proven tactics to improving recycling and waste diversion by investing in basic access to services and developing a step-by-step roadmap to improve services over the long term. It is hoped that the performance of these activities and their subsequent outcomes in New Orleans will encourage other local surrounding communities like Jefferson, St. Tammany, and East Baton Rouge Parishes (Counties) and others to undertake similar efforts to enhance recycling locally. City staff will be willing to share resources with surrounding communities and share lessons learned for the region on how to implement universal access to curbside recycling and develop a solid waste master plan. This project could become a model blueprint throughout the Gulf Coast region.

Criteria 9: Leveraging

The City intends to leverage up to \$1,401,000 in additional direct funding from The Recycling Partnership to support the activities described in Task 1 and Task 2 of the workplan. We have a letter of commitment form The Recycling Partnership expressing their intent to co-grant the city and are confident that we will be granted these additional funds within the performance period of the EPA award. See Appendix J for a letter of commitment from The Recycling Partnership.

In addition to supplemental funding, The Recycling Partnership is a strategic implementation partner and will work closely with the city to deploy education and outreach materials to optimize cart deployment and citywide education, using Partnership staff and resources.

The City is also planning to leverage internal city resources via staff, technical assistance and education funding valued at roughly \$50,000.

List of Attachments

- Appendix A: Map of Regional Recycling End Markets
- Appendix B: Project Timeline Gantt Chart
- Appendix C: Support Documentation for Environmental Justice and CEQ CEJST Map
- Appendix D: EPA Logic Model
- Appendix E: Background Solid Waste Data and Tonnage Projections
- Appendix F: Staff Resumes
- Appendix G: Letters of Support
- Appendix H: New Orleans Procurement Policy
- Appendix I: New Orleans Climate Action Equity Project
- Appendix J: The Recycling Partnership Letter of Financial Commitment
- Appendix K: New Orleans Climate Action Plan "Net-Zero by 2050"